CLAIMS (Amendment under Art. 34)

1. (After amendment) A method for assaying a specific component in a lipoprotein fraction in a serum by an enzymatic reaction, which comprises introducing a controlling means which is established by selecting the enzymatic raction, for enabling an enzymatic reaction preferentially with respect to an object component in the specific lipoprotein fraction without forming complexes nor aggregates, thereby specifically assaying the component.

2. A method for assaying a specific component in a lipoprotein fraction according to claim 1, wherein said controlling means is a means for controlling ionic strength of a reaction liquor so as to facilitate the enzymatic reaction of the target component in the specific lipoprotein fraction in the reaction liquor.

3. A method for assaying a specific component in a lipoprotein fraction according to claim 2, wherein said controlling ionic strength increases the ionic strength of the reaction liquor to a sufficiently high level so as to facilitate the enzymatic reaction of the component in a high-density lipoprotein (HDL) in the liquor.

4. A method for assaying a specific component in a lipoprotein fraction according to claim 1, wherein said controlling means is a means for enabling the enzymatic reaction directly and/or preferentially with respect to the component in the specific

lipoprotein fraction in the reaction liquor, utilizing reaction specificity of an enzyme to the specific lipoprotein.

5. A method for assaying a specific component in a lipoprotein fraction according to claim 4, wherein said means for enabling the enzymatic reaction directly and/or preferentially with respect to the component in the specific lipoprotein fraction is reacting lipoprotein lipase and/or cholesterol esterase that preferentially act(s) on the HDL fraction.

6. A method for assaying a specific component in a lipoprotein fraction according to claim 1, wherein said controlling means is a means for enabling the enzymatic reaction directly and/or preferentially with respect to the component in the specific lipoprotein fraction in the reaction liquor, utilizing reaction selectivity of a selected nonionic surfactant to the specific lipoprotein.

7. A method for assaying a specific component in a lipoprotein fraction according to claim 1, wherein a nonionic surfactant that has reaction selectivity to the HDL fraction and an HLB value of 16 or more is used as said nonionic surfactant, thereby enabling the enzymatic reaction directly and/or preferentially with respect to the component in the HDL fraction in the reaction solution.

8. The method for assaying a specific component in a lipoprotein

fraction according to claim 1, wherein said assay method according to claim 5 and said assay method(s) according to claims 3 and/or 7 are carried out in combination.

9. The method for assaying a specific component in a lipoprotein fraction according to claim 1, wherein said assay method(s) according to claim 4 and said assay method according to claims 2 and/or 6 are carried out in combination.

10. The method for assaying a specific component in a lipoprotein fraction according to claim 1, wherein said method is a method for assaying cholesterol in an LDL fraction, which comprises introducing a means for selectively subjecting a cholesterol component in an HDL fraction to an enzymatic reaction to assay or digest thereof in the first enzymatic reaction system utilizing said assay method according to claim 8 or 9, and then subjecting the cholesterol component in the LDL fraction to an enzymatic reaction in a second enzymatic reaction system by utilizing said assay method according to claim 4 and a nonionic surfactant that has an HLB value of 11 to 13.

11. The method for assaying a specific component in a lipoprotein fraction according to claim 1, wherein said method is a method for assaying cholesterol in a VLDL (very low-density lipoprotein) fraction, which comprises simultaneously or separately treating said first enzymatic reaction system and said second enzymatic

reaction system in said assay method according to claim 10 to have the cholesterol component remained and then introducing a means for decomposing the VLDL fraction to subject the cholesterol component in the VLDL fraction to an enzymatic reaction.

12. The method for assaying a specific component in a lipoprotein fraction according to any one of claims 8 to 11, further comprising a step for adding cholesterol oxidase or cholesterol dehydrogenase to digest free cholesterol.

13. The method for assaying a specific component in a lipoprotein fraction according to any one of claims 1 to 12, wherein pH of the reaction solution is selected from within a range where the lipoprotein does not form aggregates nor make turbidity of the reaction solution and in view of an optimum pH of an enzyme used in the enzymatic reaction of the component in the lipoprotein.